

Trying 3106016892...Open

Welcome to STN International! Enter x:x
LOGINID:sssptal6l9lxw
PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America
NEWS 2 Dec 17 The CA Lexicon available in the CAPLUS and CA files
NEWS 3 Feb 06 Engineering Information Encompass files have new names
NEWS 4 Feb 16 TOXLINE no longer being updated
NEWS 5 Apr 23 Search Derwent WPINDEX by chemical structure
NEWS 6 Apr 23 PRE-1967 REFERENCES NOW SEARCHABLE IN CAPLUS AND CA
NEWS 7 May 07 DGENE Reload

NEWS EXPRESS April 18 CURRENT WINDOWS VERSION IS V6.0,
CURRENT MACINTOSH VERSION IS V5.0C (ENG) AND V5.0JB (JP),
AND CURRENT DISCOVER FILE IS DATED 04/06
NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS INTER General Internet Information
NEWS LOGIN Welcome Banner and News Items
NEWS PHONE Direct Dial and Telecommunication Network Access to STN
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 16:16:00 ON 09 MAY 2001

=> fil reg

| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
|----------------------|------------------|---------------|
| FULL ESTIMATED COST | 0.15 | 0.15 |

FILE 'REGISTRY' ENTERED AT 16:16:11 ON 09 MAY 2001
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2001 American Chemical Society (ACS)

STRUCTURE FILE UPDATES: 8 MAY 2001 HIGHEST RN 334968-00-2
DICTIONARY FILE UPDATES: 8 MAY 2001 HIGHEST RN 334968-00-2

TSCA INFORMATION NOW CURRENT THROUGH January 11, 2001

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Structure search limits have been increased. See HELP SLIMIT
for details.

=> s delta 9 tetrahydrocannabinol

```
          52463 DELTA
        1322560 9
          135 TETRAHYDROCANNABINOL
L1         37 DELTA 9 TETRAHYDROCANNABINOL
          (DELTA(W) 9 (W) TETRAHYDROCANNABINOL)
```

=> fil caplus uspatfull

| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
|----------------------|---------------------|------------------|
| FULL ESTIMATED COST | 11.71 | 11.86 |

FILE 'CAPLUS' ENTERED AT 16:16:47 ON 09 MAY 2001
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2001 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPATFULL' ENTERED AT 16:16:47 ON 09 MAY 2001
CA INDEXING COPYRIGHT (C) 2001 AMERICAN CHEMICAL SOCIETY (ACS)

=> s l1

```
L2         4157 L1
```

=> s water and ethanol and propylene glycol

```
L3         38914 WATER AND ETHANOL AND PROPYLENE GLYCOL
```

=> s l2 and l3

```
L4         5 L2 AND L3
```

=> dup rem l4

PROCESSING COMPLETED FOR L4
L5 4 DUP REM L4 (1 DUPLICATE REMOVED)

=> d abs ibib

```
L5  ANSWER 1 OF 4  CAPLUS  COPYRIGHT 2001 ACS          DUPLICATE 1
AB  Disclosed is a cosmetic or medical compn. for topical application to the
    skin. It results in the transdermal passage of an active ingredient, or
    in the introduction of such agent into the skin. The essential
components
    of such compns. are phospholipids, an aliph. alc. of three or four carbon
    atoms or a combination of these alcs., water and a compatible
    active ingredient, optionally with propylene glycol.
    Compns. advantageously comprise from 0.5% to 10% phospholipids, from 5%
to
    35% of a C3-4-alc., 15 to 30% ethanol, which contain together at
    least 20% but not more than 40% of ethanol and the C3-alc.; up
    to 20% propylene glycol, at least 20% water
    and at least one active ingredient. The compns. are suitable for the
    topical application of a wide variety of cosmetic and pharmaceutically
    active compds. Phospholipids of choice are phosphatidylcholines,
    hydrogenated phosphatidylcholines, phosphatidic acids,
```

phosphatidylserines, phosphatidylethanolamines, phosphatidylglycerols and phosphatidylinositols. For example, liposomes contg. diclofenac Na 1, phospholipids 1, Carbopol 934 0.9, 10 % NH4OH soln. 1.8, **ethanol** 21.9, and **propylene glycol** 4.16 % were formulated.

ACCESSION NUMBER: 1998:140749 CAPLUS
DOCUMENT NUMBER: 128:158950
TITLE: Composition for applying active substances to or through the skin
INVENTOR(S): Touitou, Elka
PATENT ASSIGNEE(S): Yissum Research Development Co. of the Hebrew University of Jerusalem, Israel
SOURCE: U.S., 16 pp. Cont.-in-part of U.S. 5,540,934.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|-------------|
| US 5716638 | A | 19980210 | US 1995-563144 | 19951127 |
| US 5540934 | A | 19960730 | US 1994-264204 | 19940622 |
| IL 114229 | A1 | 19990509 | IL 1995-114229 | 19950620 |
| ZA 9505193 | A | 19970324 | ZA 1995-5193 | 19950622 |
| AU 9944722 | A1 | 19991028 | AU 1999-44722 | 19990825 |
| PRIORITY APPLN. INFO.: | | | US 1994-264204 | A2 19940622 |
| | | | AU 1995-29776 | A3 19950621 |

=> d 2 abs ibib

L5 ANSWER 2 OF 4 USPATFULL

AB A cosmetic or medical composition for topical application to the skin.
It results in the transdermal passage of an active ingredient, or in the
introduction of such agent into the skin. The essential components of such compositions are a phospholipid, a lower aliphatic alcohol of two to four carbon atoms, optionally with **propylene glycol**, **water** and a compatible active ingredient. The alcohol content is generally from 20 to 50%, and when **propylene glycol** is present, the combined percentage of alcohol and glycol being up to about 70%. The composition are suitable for the topical application of a wide variety of cosmetic and pharmaceutical compounds.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 96:67758 USPATFULL
TITLE: Compositions for applying active substances to or through the skin
INVENTOR(S): Touitou, Elka, 6 Demumit, Givat Canada, Gilo, Jerusalem
93890, Israel

| | NUMBER | DATE |
|-----------------------|--|--------------|
| PATENT INFORMATION: | US 5540934 | 19960730 |
| APPLICATION INFO.: | US 1994-264204 | 19940622 (8) |
| DOCUMENT TYPE: | Utility | |
| PRIMARY EXAMINER: | Kishore, Gollamudi S. | |
| LEGAL REPRESENTATIVE: | Keck, Mahin & Cate | |
| NUMBER OF CLAIMS: | 5 | |
| EXEMPLARY CLAIM: | 1 | |
| NUMBER OF DRAWINGS: | 4 Drawing Figure(s); 3 Drawing Page(s) | |
| LINE COUNT: | 586 | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 3 abs ibib

L5 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2001 ACS

AB A cosmetic or medical compn. of topical application to the skin. It results in the transdermal passage of an active ingredient, or in the introduction of such agent into the skin. The essential components of such compns. are a phospholipid, a lower aliph. alc. of two to four C atoms, optionally with **propylene glycol, water** and a compatible active ingredient. The alc. content is generally from 20-50%, and when glycol is present, the combined percentage of alc. and glycol being up to about 70%. The compns. are suitable for the topical application of a wide variety of cosmetic and pharmaceutical compds.

ACCESSION NUMBER: 1996:128094 CAPLUS

DOCUMENT NUMBER: 124:156055

TITLE: Compositions for applying active substances to or through the skin

INVENTOR(S): Touitou, Elka

PATENT ASSIGNEE(S): Yissum Research Development Co., Israel

SOURCE: PCT Int. Appl., 37 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|-------------|
| WO 9535095 | A1 | 19951228 | WO 1995-EP2397 | 19950621 |
| W: AU, BR, CA, CZ, FI, HU, JP, KR, LK, MX, NO, NZ, PL, RO, RU, SK, | | | | |
| US | | | | |
| RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| US 5540934 | A | 19960730 | US 1994-264204 | 19940622 |
| IL 114229 | A1 | 19990509 | IL 1995-114229 | 19950620 |
| AU 9529776 | A1 | 19960115 | AU 1995-29776 | 19950621 |
| EP 804160 | A1 | 19971105 | EP 1995-925756 | 19950621 |
| EP 804160 | B1 | 19991006 | | |
| R: CH, DE, FR, GB, IT, LI, NL, IE | | | | |
| ZA 9505193 | A | 19970324 | ZA 1995-5193 | 19950622 |
| AU 9944722 | A1 | 19991028 | AU 1999-44722 | 19990825 |
| PRIORITY APPLN. INFO.: | | | US 1994-264204 | A 19940622 |
| | | | AU 1995-29776 | A3 19950621 |
| | | | WO 1995-EP2397 | W 19950621 |

=> d 4 abs ibib

L5 ANSWER 4 OF 4 USPATFULL

AB A combined process is described in which inclusion complexes are formed from guest molecules and cyclodextrins during agglomeration of the cyclodextrins. Sufficient agitation in the presence of a small amount of

water results in complex formation and bonding into strong agglomerates. The agglomerates are strong and stable and useful inter alia in foods (the guest molecules are flavors), pharmaceuticals (the guest molecules are drugs) and agriculture (the guest molecules are various agrochemicals).

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 91:98384 USPATFULL

TITLE: Inclusion complexes of cyclodextrins by agglomeration

INVENTOR(S): Majid, Abdul, Ottawa, Canada

PATENT ASSIGNEE(S):

Ripmeester, John A., Gloucester, Canada
National Research Council of Canada, Ottawa, Canada
(non-U.S. corporation)

| | NUMBER | DATE |
|---------------------|----------------|--------------|
| PATENT INFORMATION: | US 5070081 | 19911203 |
| APPLICATION INFO.: | US 1989-337969 | 19890414 (7) |

| | NUMBER | DATE |
|-----------------------|--------------------|----------|
| PRIORITY INFORMATION: | CA 1988-564609 | 19880420 |
| DOCUMENT TYPE: | Utility | |
| PRIMARY EXAMINER: | Griffin, Ronald W. | |
| LEGAL REPRESENTATIVE: | Thomson, Alan A. | |
| NUMBER OF CLAIMS: | 12 | |
| EXEMPLARY CLAIM: | 1 | |
| LINE COUNT: | 281 | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 4 kwic

L5 ANSWER 4 OF 4 USPATFULL

AB . . . from guest molecules and cyclodextrins during agglomeration of the cyclodextrins. Sufficient agitation in the presence of a small amount of **water** results in complex formation and bonding into strong agglomerates. The agglomerates are strong and stable and useful inter alia in. . .

SUMM (4) The bioavailability of poorly soluble drugs can be enhanced. The solubility in **water**, as well as the rate of dissolution of poorly soluble substances can be increased. Following oral administration of poorly **water** soluble drugs, higher blood levels can be achieved if they are complexed with cyclodextrins.

SUMM . . . used for reducing the bitterness of orange and grapefruit juice, animal and plant protein hydrolysates, mushroom extracts, certain

stereoisomers, and **propylene glycol**. It can lighten specific smells of mutton, fish meat, yeast extracts, soybean milk,

fish

meal, lecithin, and old grains.

SUMM (6) The resulting agglomerates or pellets are strongly bonded by residual **water** remaining after drying and are very stable.

SUMM . . . contacting the cyclodextrin in solid form with a selected guest

molecule material in the presence of a small amount of **water** sufficient to serve as agglomeration binding liquid, to form a mixture, SUMM When the guest molecule material is a **water**-immiscible liquid, sufficient may be used to form a continuous liquid phase, and the agglomeration follows spherical agglomeration techniques (see A. . . 166-170). If the guest molecule is too viscous, an operative lower viscosity can be achieved by the addition of a **water**-immiscible solvent, e.g. hexane and diethylether.

SUMM The amount of **water** added normally will be within about 10 to about 100% by wt. based on the cyclodextrin, preferably about 25-50%. Added **water** has been found necessary for formation of the complex and for agglomeration.

SUMM . . . matched to the size of the guest molecule. The match need not be exact. Usually the cyclodextrin will contain some **water** of hydration: additional **water** as outlined above is essential both for inclusion complex and for agglomerate formation.

SUMM The resulting agglomerates are easily separated, recovered, handled and utilized. Not all of the added **water** is removed on drying: it appears some residual **water** is binding the cyclodextrin

particles together. Under appropriate conditions the agglomerates are readily dispersed, dissolved or otherwise incorporated or applied.

SUMM The size of the agglomerates can be varied by controlling the amount of **water** added and to a lesser degree the agitation. Increasing the amount of **water** tends to increase the agglomerate size. Increasing the agitation tends to decrease the agglomerate size.

SUMM When the guest materials are **water**-soluble solids, wet pelletization techniques including a severe agitation, may be used to form the agglomerates.

SUMM . . . hydrated .beta.-cyclodextrin was dispersed in 2-5 ml of liquid guest compound in 250 ml glass jar. A small amount of **water** (50-500 microliter) was added to this suspension. The jar was sealed tightly using a polyethylene gasket. The contents were agitated. . .

DETD . . . g of hydrated .beta.-cyclodextrin was dispersed in 5 g of citral in a 250 ml glass jar. 100 microliters of **water** was added to this suspension and the contents agitated on a Spex (TM) mixer for 10 minutes. This resulted in. . .

DETD . . . spectra clearly showed significant broadening of the carbon resonances of the .beta.-cyclodextrin. This broadening is because of the displacement of **water** molecules in the host cavity by the citral molecules, indicating the formation of an inclusion complex. The guest molecule's resonances. . .

DETD 0.65 g of hydrated .beta.-cyclodextrin was dispersed in 5 g of citronellal in a glass jar. 100 microliters of **water** was added to this suspension and the contents agitated on a Spex (TM) mixer for 5 minutes. This gave 0.5-2. . .

DETD 0.5 g of hydrated .beta.-cyclodextrin was dispersed in 7 g of limonene. 100 microliters of **water** was added to this suspension and the contents agitated on a Spex (TM) mixer for 10 minutes.

Microagglomerates of about. . .

DETD . . . molecule were ground together in an agate pestle and mortar in the presence of 50-500 microliters (preferably 100-300 microliters) of **water**. The resulting paste was transferred to a 100 ml Teflon (TM) jar with a screw type cap and a rubber. . .

DETD . . . form the complex and agglomerate using viscous liquid guest molecule material and cyclodextrin by dissolving the guest material in a **water**-immiscible solvent, adding the cyclodextrin and **water** and agitating as a slurry. Example 5 is typical.

DETD Tetrahydrocannabinol (THC) was obtained as a solution in **ethanol**. The **ethanol** was evaporated and 0.1 g of THC was dissolved in 15 ml of hexane. .beta.-cyclodextrin hydrate 0.2 g and 50 microliters of **water** were dispersed in the hexane solution, and the mixture agitated in a Spex (TM) mixer for 5-10 minutes. The resulting. . .

DETD Where the guest molecules are gaseous, it is possible to disperse the cyclodextrin particle in a **water**-immiscible liquid, add the **water** required for inclusion complex formation and agglomeration, and dissolve a stoichiometric excess of the gaseous guest molecules in the liquid. . .

CLM What is claimed is:
. . . the cyclodextrin in solid particulate form with a selected guest molecule material in the presence of a small amount of **water** only sufficient to serve as agglomeration binding liquid, to form a mixture, b) agitating the mixture sufficiently to cause interpenetration. . .
5. The process of claim 1 in which the amount of **water** is from about 10 to about 100% by wt. based on the cyclodextrin.
7. The process of claim 1 in which the recovered agglomerates are dried to remove unbound **water** and any excess liquid guest material.

11. The process of claim 1 in which the guest material is gaseous, a **water**-immiscible liquid is present and an excess of the gaseous guest molecules are dissolved in the liquid phase in step (a).

by 12. Agglomerates of guest inclusion complexes of cyclodextrins formed substantially concurrent complex formation and agglomeration, and containing bound **water**.

IT 62-44-2DP, Phenacetin, inclusion complex with hydrated cyclodextran
69-72-7DP, Salicylic acid, inclusion complex with hydrated cyclodextran
106-23-0DP, Citronellal, inclusion complex with hydrated cyclodextran
138-86-3DP, Limonene, inclusion complex with hydrated cyclodextran
298-57-7DP, Cinnarizine, inclusion complex with hydrated cyclodextran
1972-08-3DP, Tetrahydrocannabinol, inclusion complex with
hydrated cyclodextran 5392-40-5DP, Citral, inclusion complex with
hydrated cyclodextran 7585-39-9DP, .beta.-Cyclodextrin, Hydrated,
inclusion complexes 12619-70-4DP, Cyclodextrin, Hydrated, inclusion
complexes
(prepn. of, by agglomeration)